

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-87 (Cancelled):

Claim 88 (New): An isolated or purified polynucleotide which encodes a variant of the polypeptide of SEQ ID NO: 2,

wherein said polypeptide variant comprises the amino acid sequence of SEQ ID NO: 2, except for one or more amino acid substitutions between positions 1-10, positions 190-200 or positions 420-450, and

wherein lysine production is improved by the expression of said isolated or purified polynucleotide in a coryneform bacterium compared to the expression of the polypeptide of SEQ ID NO: 2 in the same type of coryneform bacterium.

Claim 89 (New): The polynucleotide of Claim 88, which encodes a polypeptide that comprises one or more amino acid substitutions between positions 1-10 of SEQ ID NO: 2.

Claim 90 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-proline at position 5 of SEQ ID NO: 2 is substituted by L-leucine, L-isoleucine or L-valine.

Claim 91 (New): The polynucleotide of Claim 88, which encodes a polypeptide comprising one or more amino acid substitutions between positions 190-200 of SEQ ID NO: 2.

Claim 92 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-serine at position 196 of SEQ ID NO: 2 is substituted by L-phenylalanine or L-tyrosine.

Claim 93 (New): The polynucleotide of Claim 88, which encodes a polypeptide that comprises one or more amino acid substitutions between positions 420-450 of SEQ ID NO: 2.

Claim 94 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-leucine at position 424 of SEQ ID NO: 2 is substituted by L-proline or L-arginine.

Claim 95 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-serine at position 425 of SEQ ID NO: 2 is substituted by L-threonine or L-alanine.

Claim 96 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-glutamine at position 426 of SEQ ID NO: 2 is substituted by L-leucine or L-lysine.

Claim 97 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-aspartic acid at position 429 of SEQ ID NO: 2 is substituted by L-isoleucine, L-valine or L-leucine.

Claim 98 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-histidine at position 439 of SEQ ID NO: 2 is substituted by a proteogenic amino acid other than L-histidine.

Claim 99 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-serine at position 444 of SEQ ID NO: 2 is substituted by L-leucine, L-tyrosine or L-tryptophan.

Claim 100 (New): The polynucleotide of Claim 88, which encodes a polypeptide in which L-leucine at position 446 of SEQ ID NO: 2 is substituted by L-proline or L-isoleucine.

Claim 101 (New): The polynucleotide of Claim 88, which encodes a polypeptide comprising SEQ ID NO: 2, except for one or more of the following substitutions: L-proline at position 5 substituted by L-leucine, L-serine at position 196 substituted by L-phenylalanine, L-aspartate at position 429 substituted by L-valine, or L-histidine at position 439 substituted by L-tyrosine.

Claim 102 (New): The polynucleotide of Claim 88 which encodes the polypeptide of SEQ ID NO: 4.

Claim 103 (New): The polynucleotide of Claim 88, which comprises SEQ ID NO: 3.

Claim 104 (New): The polynucleotide of Claim 88 encoding the polypeptide of SEQ ID NO: 6.

Claim 105 (New): The polynucleotide of Claim 88, which comprises SEQ ID NO: 5.

Claim 106 (New): The full complement of the polynucleotide of Claim 88.

Claim 107 (New): A vector comprising the polynucleotide of Claim 88.

Claim 108 (New1): A shuttle vector or plasmid vector comprising the polynucleotide of Claim 88.

Claim 109 (New): A host cell comprising the polynucleotide of Claim 88.

Claim 110 (New): The host cell of Claim 109, wherein the polynucleotide is integrated in the chromosome.

Claim 111 (New): The host cell of Claim 109, wherein the polynucleotide is present on a plasmid.

Claim 112 (New): The host cell of Claim 109, which is a coryneform bacterium.

Claim 113 (New): The host cell of Claim 109, which is of the genus *Corynebacterium*.

Claim 114 (New): The host cell of Claim 109, which is selected from the group consisting of *Corynebacterium glutamicum*, *Corynebacterium acetoglutamicum*, *Corynebacterium acetoacidophilum*, *Corynebacterium thermoaminogenes*, *Corynebacterium melassecola*, *Brevibacterium flavum*, *Brevibacterium lactofermentum*, and *Brevibacterium divaricatum*.

Claim 115 (New): A method for making an amino acid comprising:

culturing the host cell of Claim 109 for a time and under conditions suitable for the production of said amino acid, and  
recovering or isolating said amino acid.

Claim 116 (New): The method of Claim 115, wherein said amino acid is L-lysine.

Claim 117 (New): The method of Claim 115, wherein said amino acid is L-glutamate.

Claim 118 (New): A method for making a variant of the polypeptide of SEQ ID NO: 2 comprising:

culturing the host cell of Claim 109 for a time and under conditions suitable for expression of said polypeptide, and  
recovering or isolating said polypeptide.

Claim 119 (New): A variant of the polypeptide of SEQ ID NO: 2,  
wherein said polypeptide variant comprises the amino acid sequence of SEQ ID NO: 2, except for one or more amino acid substitutions between positions 1-10, positions 190-200 or positions 420-450, and

wherein lysine production is improved by expression of said isolated or purified polynucleotide in a coryneform bacterium compared to expression of the polypeptide of SEQ ID NO: 2 in the same type of coryneform bacterium.